TABLE OF CONTENTS

VOLUME 33

PAGES

Portrait of HERBERT SPENCER JENNINGS ..... *Frontispiece*

Abstracts of Papers Presented at the 1948 Meetings of the Genetics Society of America 603

BOURICIUS, JEAN K., Embryological and cytological studies in rats heterozygous for a probable reciprocal translocation 577–587

BURNHAM, C. R., Cytogenetic studies of a translocation between chromosomes 1 and 7 in maize 5–21

CASPARI, ERNST, and CURT STERN, The influence of chronic radiation with gamma-rays at low dosages on the mutation rate in *Drosophila melanogaster* 75–95

CAVALCANTI, A. G. LAGDEN, Geographic variation of chromosome structure in *Drosophila prosaltans* 529–536

CASTLE, W. E., The ABC of color inheritance in horses 22–35

CHRISTOFF, M., and M. A. CHRISTOFF, Meiosis in the somatic tissue responsible for the reduction of chromosome number in progeny of *Hieracium Hoppeanum* Schult 36–42

COLEMAN, L. C., The cytology of some Western species of Trimerotropis (Acrididae) 519–528

CROW, JAMES F., Alternative hypotheses of hybrid vigor 477–487

DEMEREC, M., Induction of mutations in Drosophila by dibenzanthracene 337–348

DOBZHANSKY, THEODOSIUS, Genetics of natural populations. XVI. Altitudinal and seasonal changes produced by natural selection in certain populations of *Drosophila pseudoobscura* and *Drosophila persimilis* 158–176

DOBZHANSKY, THEODOSIUS, Genetics of natural populations. XVIII. Experiments on chromosomes of *Drosophila pseudoobscura* from different geographic regions 588–602

DOBZHANSKY, THEODOSIUS, and HOWARD LEVENE, Genetics of natural populations. XVII. Proof of operation of natural selection in wild populations of *Drosophila pseudoobscura* .. 537–547

ENDERS, TRUDY, and CURT STERN, The frequencies of twins, relative to age of mothers, in American populations 263–272

GEIRINGER, HILDA, On the mathematics of random mating in case of different recombination values for males and females .. 548–564

LANDAUER, WALTER, The phenotypic modification of hereditary polydactylism of fowl by selection and by insulin 133–157

LAUGHNAN, J. R., The action of allelic forms of the gene *A* in maize. I. Studies of variability, dosage and dominance relations. The divergent character of the series 488–517

MAAS, WERNER KARL, Spectrophotometric and chromatographic adsorption analysis of the red eye pigment of *Drosophila melanogaster* 177–190

NEWCOMBE, HOWARD B., Delayed phenotypic expression of spontaneous mutations in *Escherichia coli* 447–476
PARKER, D. R., Observations on crossing over induced by X-rays in the males of Drosophila 304–310
PREER, JOHN R., JR., A study of some properties of the cytoplasmic factor, "Kappa," in *Paramecium aurelia*, Variety 2 349–404
RUSSELL, ELIZABETH S., A quantitative histological study of the pigment found in the coat color mutants of the house mouse. II. Estimates of the total volume of pigment 228–236
RUSSELL, LIANE BRAUCH, and W. L. RUSSELL, A study of the physiological genetics of coat color in the mouse by means of the dopa reaction in frozen sections of skin 237–262
SHACKELFORD, RICHARD M., The nature of coat color differences in mink and foxes 311–336
SHENG, T. C., and FRANCIS J. RYAN, Mutations involving the proproduction of conidia and the requirement for leucine in a mutant of Neurospora 221–227
SHULL, GEORGE HARRISON, What is "heterosis"? 439–446
SONNEBORN, T. M., HERBERT SPENCER JENNINGS 1–4
SPENCER, WARREN P., and CURT STERN, Experiments to test the validity of the linear r-dose/mutation frequency relation in Drosophila at low dosage 43–74
STADLER, L. J., and HERSCHEL ROMAN, The effect of X-rays upon mutation of the gene *A* in maize 273–303
STEPHENS, S. G., A biochemical basis for the pseudo-allelic anthocyanin series in Gossypium 191–214
STERN, CURT, Negative heterosis and decreased effectiveness of alleles in heterozygotes 215–219
SWANSON, C. P., ALEXANDER HOLLAENDER, and B. N. KAUFMANN, Modification of the X-ray and ultraviolet induced mutation rate in *Aspergillus terreus* by pretreatment with near infrared radiation 429–437
TYLER, W. J., and A. B. CHAPMAN, Genetically reduced prolificacy in rats 565–576
ZIELINSKI, QUENTIN B., Fasciation in Lycopersicon. I. Genetic analysis of dominance modification 405–428

CORRIGENDA

Volume 32, 1947

Page 609, first column of table, insert "wild" before No. 51. . . .

Volume 33, 1948

Page 91, five lines from bottom, for "0.1r/min. against 0.017r/min." read "0.01r/min. against 0.0017r/min."

Page 227, nine lines from top, for "33657" read "33757."

Page 480, three lines from bottom, for "*A*" read "*AA*."

Page 481, seven lines from bottom, for "W" in denominator of formula read "$\overline{W}$."